Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_

**Algebra 1 Final Exam Review (2nd Semester)**

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| 1.)  Find the ordered pairs for the following points.    A - \_\_\_\_\_\_ B - \_\_\_\_\_\_  C - \_\_\_\_\_\_ D - \_\_\_\_\_\_  E - \_\_\_\_\_\_ F - \_\_\_\_\_\_ | 2.)  Write  in slope intercept form.  *Answer* | 3.)  What is the solution of the equation if the Domain is  *Answer*  {( , ), ( , ), ( , )} |
| 4.)  Draw the graph of the line represented by the following equation | 5.)  What is the x-intercept of the line with the equation?  *Answer* | 6.)  What is slope if the line passing through (2, 18) and (16, -3).  *Answer* |
| 7.)  What is the slope of the following line?    *Answer* | 8.)  Find the equation of the line through (3, 2) with the slope of.  *Answer* | 9.)  If line *q* has a slope of, then what is the slope of a line perpendicular to *q*?  *Answer* |
| 10.)  Find the equation of the line perpendicular to the graph of  and passing through  (-1,-7).  *Answer* | 11.)  What is the equation of the line bellow?    *Answer* | 12.)  What is the equation, in slope-intercept form, of the line whose graph has a slope of  and a y-intercept of ?    *Answer* |
| 13.)  What is the coordinates of the midpoint of the line segment with endpoints (1, 2) and (5, -8)?    *Answer* | 14.)  Are the following lines (a) parallel, (b) perpendicular, (c) the same line, or (d) neither?      *Answer* | 15.)  Find the equation of the line through (7, 3) and (0, 7).    *Answer* |
| 16.)  Which pair of lines is the graph of the system of equations        *Answer* | 17.)  Based on the scatter plot, where you expect the y-value to be in the year 2020?    *Answer* | 18.)  What is the number of solutions for the system of equations represented by lines *d* and *q*?    *Answer* |
| 19.)  Simplify  *Answer* | 20.)  Simplify  *Answer* | 21.)  Simplify  *Answer* |
| 22.)  A man canoeing can travel downstream 10 miles in 5 hours. The log can travel upstream in 10 hours. What is the rate of the current?  *Answer* | 23.)  Solve the system of equation by using the elimination method.      *Answer* | 24.)  Solve the system of equation by using the substitution method.      *Answer* |
| 25.)  State the region should be shaded when solving the following system.        *Answer* | 26.)  A ball park’s ground level seating is $45.00, but the upper deck seats are $ 25.00. Yesterday, the park collected $321,020.00 from 9,452 people. Using the variables: *g* = # of ground level tickets and *u* = # of upper deck tickets, write a system of equation that would find the number of $45.00 and $25.00 seats sold yesterday.  *Answer* | 27.)  Graph the following inequality. |
| 28.) Simplify  *Answer* | 29.)  Simplify  *Answer* | 30.)  Simplify  *Answer* |
| 31.)  Simplify  *Answer* | 32.)  Simplify  *Answer* | 33.)  Simplify  *Answer* |
| 34.) What is the degree of ?  *Answer* | 35.)  Simplify  *Answer* | 36.)  Simplify  *Answer* |
| 37.) Find the GCF of and  *Answer* | 38.)  Completely factor  *Answer* | 39.)  Use long division to simplify  *Answer* |
| 40.) Factor  *Answer* | 41.)  Factor  *Answer* | 42.)  Completely factor  *Answer* |
| 43.)  Factor the following expression completely.    *Answer* | 44.)  Factor the following expression completely.    *Answer* | 45.)  Solve the following equation for *j*.    *Answer* |
| 46.)  Simplify  *Answer* | 47.)  Simplify  *Answer* | 48.)  Which one of the following is a perfect square trinomial?  a.)  b.)  c.)  d.) |
| 49.)  State the solution set for the following equation.    *Answer* | 50.)  Simplify  *Answer* |  |